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Short communications

Report of a case of progressive greying in the Moorland Chat *Pinarochroa sordida* in Bale Mountains National Park, Ethiopia

Processes controlling bird colouration and patterning, including a variety of pigmentary and structural mechanisms, have been extensively studied in recent years (Mason & Bowie 2020, Price-Waldman & Stoddard 2021). In addition to phenotypic variation undergoing natural and sexual selection, individuals with an atypical plumage are occasionally or routinely observed in nature in various bird species (Gayen *et al.* 2022, van Grouw 2013). As reviewed by van Grouw (2021), the seven most common types of colour aberrations in birds result from defects in the development of melanin cells (Leucism, Progressive greying), defects in melanin synthesis (Albino, Brown, Ino), defects in the melanin deposit into feathers (Dilution) or defects in the production and distribution of melanin (Melanism). Melanin aberrations impact the production or deposition of melanin pigments, but not of other colour pigments such as carotenoids, allowing observers to see colours and patterns normally hidden by melanin. Therefore, sightings of atypical birds may be used by researchers to understand the evolution and underlying genetics of bird colour and patterning (Aguillon & Shultz 2022). In this broader evolutionary context, but also in terms of biodiversity management, reporting sightings of atypical birds in indexed journals is important.

Here, we report the observation of an abnormally coloured Moorland Chat *Pinarochroa sordida* (also previously named *Cercomela sordida*), displaying a lack of melanin over almost all of its plumage. The Moorland Chat is a monotypic species comprising four recognized subspecies in northeast Africa, with *P. sordida sordida* occupying high altitude moorlands in Ethiopia. Individuals of the species are typically dark brown with a paler grey-brown below and a tail showing a black-and-white inverted "T" pattern; bill, legs and feet are black; eyes are dark brown (Redman *et al.* 2009).

The individual was first observed in Bale Mountains National Park, Ethiopia, on 3 October 2022 from 09:03 to 09:15 (local time) near Fincha Habera waterfall (7°01′01″ N, 39°43′19″ E; 3463 m a.s.l.). The surrounding habitat comprised alpine grassland on a rocky slope dominated by *Kniphofia foliosa*. The bird was displaying a typical behaviour; foraging, hopping and low flying near the ground or among *Kniphofia* flower stems. It came to within 2–3 m of the observers multiple times, permitting detailed observation of its plumage and high-resolution photography (Fig. 1). The individual was an adult of undetermined sex (there is no sexual dimorphism in this species). Its plumage was white with some dark brown or partially dark brown feathers in the wing and tail (Fig. 1a). Small light brown patches were apparent on the chest (Fig. 1b), while in the down layer, some feathers patchily distributed across the body were dark brown (Fig. 1c, 1d). In flight (Fig. 1e), it was apparent that at least three feathers in the primaries and two in the secondaries were partly or normally pigmented, although the bird was undergoing a post-breeding moult and several of the secondaries were missing. Pigmentation appeared patchy on the tail feathers. The bill, tarsi and feet were pinkish pale yellow, while the eyes had the usual dark brown colour. It was also seen perched a few metres away from a normally-coloured Moorland Chat (Fig. 1f), without any antagonistic interactions observed.

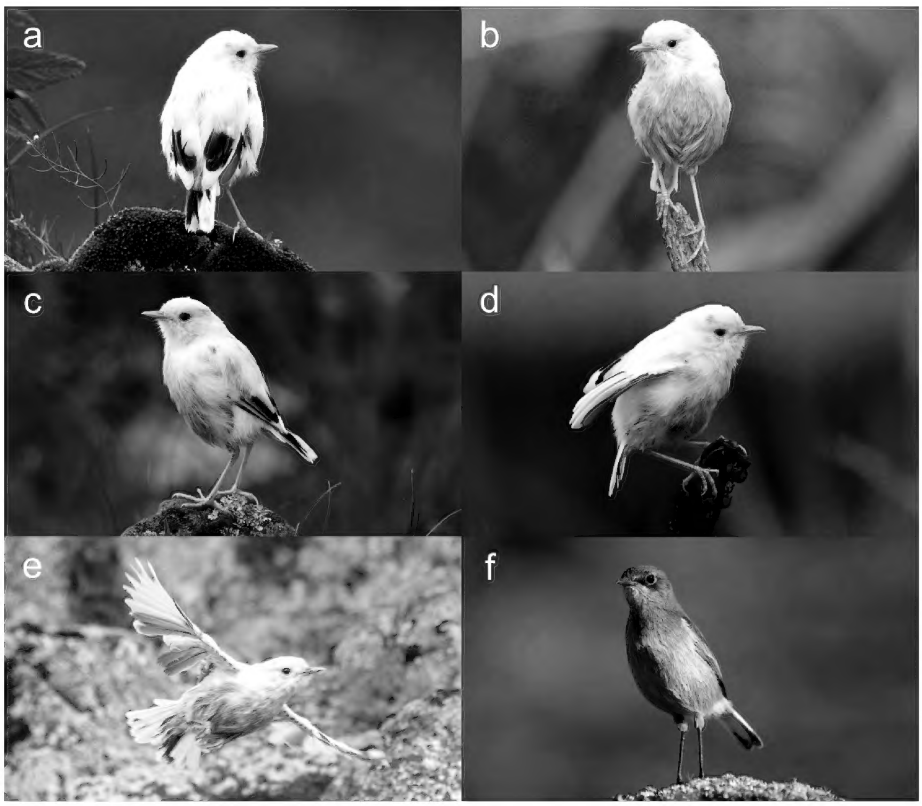

Figure 1. Moorland Chat *Pinarochroa sordida* photographed in Bale Mountains National Park, Ethiopia, displaying a lack of melanin over almost all of its plumage, probably as a result of progressive greying. Pictures show the back (a), front (b), left side (c), right side (d), tail and wings in flight (e) of the white-feathered individual, and a normal Moorland Chat (f) for comparison. Photos: Carine Lavril (a, c, d) and Adrien Lesaffre (b, e, f).

Partly coloured feathers and asymmetrical whiteness are unlikely to be caused by leucism (van Grouw 2006). As such, loss of pigmentation in feathers, bill and legs of this individual most probably result from progressive greying (a condition causing progressive loss of melanin pigment), which is often the most common cause for lack of pigmentation in feathers (van Grouw 2021). Although progressive greying in birds is not generally related to old age (geriatric greying), it may be in some cases, such as in Eurasian Jackdaws *Corvus monedula*, where the presence of some pigmentation in affected feathers also suggest a decreased activity of melanin cells rather than their complete disappearance (van Grouw 2021). The partly pigmented feathers in this Moorland Chat may indicate that progressive greying in this species could be related to senescence as well. Different forms of progressive greying occur (some heritable and others not), but the causes of most are currently unknown (van Grouw 2021, van Grouw & Hume 2016). Also, different mutations (in addition to feathers bleaching by sunlight) or external factors (e.g., food deficiency or illness) may result in an absence of pigment in feathers. Therefore, correctly identifying the nature and causes of aberrant plumage may be challenging without knowing the history of the bird (van Grouw 2013, 2021). Confirming progressive greying will require re-sightings of the

same individual after each moult. As the individual appeared to be in a late stage of the condition, it may turn completely white after its next moult.

Two previous publications refer to observations of Moorland Chats described as "partially leucistic". The first observation concerned an individual near Debre Birhan, Ethiopia, that was all grey with a partly white head and white remiges and tertials (Ash & Atkins 2009). The second report comprised three birds in a mixed passerine flock that presented a partly white head and white spots on wing feathers, seen in the same area as the present observation (720 m away; Sultan *et al.* 2022). While our observation is not the first record of a white-feathered Moorland Chat, it stands out because of the particularly extended white pattern of this individual (80% of its body compared to approximately 15% in previous reports) and the evidence of progressive greying, a first for this species. Also, contrary to the previous report, the individual we observed was not part of a flock and seemed to be resident in the area. It was subsequently re-observed at the same location every day from 4 to 7 October 2022.

Populations exposed either to inbreeding, high environmental stress or urban environments may show higher frequency of plumage aberrations (Bensch *et al.* 2000, Izquierdo *et al.* 2018, Møller & Mousseau 2001). As they appear more conspicuous, white-coloured birds may be harassed by conspecifics (Withgott & McMahon 1993) or exhibit a lower survival than normally-coloured individuals (Ellegren *et al.* 1997). But it is not necessarily the case, and some colour-aberrant birds survive and reproduce well (Bensch *et al.* 2000, van Grouw 2021). The repeated observations of white-feathered Moorland Chats in the same area may potentially indicate the establishment of a small population. Atypical birds usually generate some attention in the birding public, but are often overlooked by the scientific community, despite the interesting research potential they may bring (Aguillon & Shultz 2022). This observation adds to the unique fauna and flora known to be present in Bale Mountains National Park, but a more detailed survey and a monitoring of the Moorland Chat population in the area are necessary to shed light on the various remaining questions.

Acknowledgments

We sincerely thank Hein van Grouw, senior curator at the Natural History Museum, Tring and leading expert on colour aberrations in birds, for his insight on the condition affecting the plumage of this particular individual. We also thank Dr Dominique Berteaux (Université du Québec à Rimouski) for the valuable correspondence regarding this bird.

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First nest description for the Black-tailed Oriole *Oriolus percivali* from Gishwati Forest, Rwanda

The Black-tailed Oriole *Oriolus percivali* (also called Montane Oriole or Mountain Oriole) is found in the montane and submontane forests of the Gregory and Albertine rift valley highlands of East Africa and the eastern Democratic Republic of Congo (DRC), from 1530 to 3000 m (Stevenson & Fanshawe 2020). It is a relatively common resident of Gishwati Forest in Gishwati-Mukura National Park in western Rwanda, where the authors regularly observed or heard it vocalizing between June and August 2019. While the nests are known for the other three members of the Afrotropical black-headed oriole clade (*O. larvatus, O. nigripennis,* and *O. monacha*), the nest of *percivali* has remained undescribed, and little has been documented on its reproductive habits (Walther & Jones 2020).

On 2 July 2019, while conducting a point count above the bank of a small stream for an avian survey of Gishwati Forest (01°49' S, 29°22' E; 2050–2550 m a.s.l.), we observed two adult Black-tailed Orioles visiting a nest separately and feeding two chicks in a five-minute period. We assume that these were the two parents, and that therefore, both sexes of *percivali* feed offspring in the nest. One of the adults was subsequently filmed by SI while singing from a perch next to the nest, where it proceeded to briefly feed a chick and sing again before departing (see Inman 2022).

The nest (Fig. 1) was a deep, open cup seemingly woven almost entirely from *Usnea* beard lichen, lined with fine grass and suspended hammock-like from a horizontal fork at a branch-end in the canopy of a large *Dombeya torrida.* It was approximately 15 m above ground level and there were additional strands of lichen looping around other small branches off the central stem that supported the side of the nest.

Figure 1. A Black-tailed Oriole *Oriolus percivali* nest in Gishwati Forest, Rwanda, in July 2019 (S. Inman).

We made repeated visits to the nest site to monitor nest-occupancy and await permission from government authorities at the Rwandan Ministry of Environment (MOE) and Rwanda Development Board (RDB) to collect the nest specimen after successful fledging. We made no further observations of adult or young orioles at the site, and on 7 August 2019, SI collected the nest by carefully cutting the top branch of the tree, as it became too small to safely climb. Given Rwanda's rules governing biogenic collections, SI delivered the specimen to an RDB representative as property of the state before a more rigorous examination of the nest's internal construction and materials could be made, and the status of the specimen remains unknown at this time. Nest dimensions recorded at the time of collection were as follows: height 8 cm, cup depth 6 cm, internal diameter 6 cm and external diameter 10 cm.

Nest descriptions for the three other species in the Afrotropical black-headed oriole clade that are available in Walther & Jones (2020) reveal a similar use of beard lichen in nest construction and comparable nest dimensions, along with a similar nest placement toward the top of a tree. The breeding habits of *percivali* have been documented (Walther & Jones 2020): in the DRC, where adults with enlarged gonads have been recorded from May and June as well as in September, fledglings have been seen in August, and juveniles have been documented in both April and September–November; and in Uganda, where an adult has been observed feeding a fledgling away from the nest in October. Our sighting of a nestling in July and the absence of any activity near the nest in August aligns with the observations from the DRC. Meanwhile, both parents are known to feed chicks in *O. larvatus*, while in nesting *O. monacha* and *nigripennis* the feeding habits are less well documented. Given our observations of *percivali*, in conjunction with literature accounts of *larvatus*, we predict that *monacha* and *nigripennis* should also display bi-parental provisioning of chicks in the nest.

Acknowledgements

This nest discovery was part of a larger survey effort that formed part of SI's academic studies. As such, SI thanks the Tropical Resources Institute at the Yale School of the Environment and the Yale Institute for Biospheric Studies for their financial support, which allowed for the truly invaluable company of CN in the field; Austin Dziki for his tree-climbing ability and help collecting the nest specimen; Richard Muvunyi at RDB for allowing the collection and ensuring the specimen's safe storage; Juliet Kabera at MOE for consistent assistance with logistics; and Dr Beth Kaplin for research advice. The authors thank Thierry Aimable and Jacques Albert from the Forest of Hope Association for access to Gishwati Forest via the Shinehouse Gishwati Research Station and are grateful to the RDB Tourism and Conservation Department for allowing this research under contract 060619.

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Gosling's Buntings *Emberiza goslingi* in northwest Kenya: a new species for East Africa

The discovery of the River Prinia *Prinia fluviatilis* at Lokichogio (also spelled Lokichokio) by Finch (2005) raised the possibility that other Sahelian species might exist undetected in northwest Kenya. On 2 May 2022, the authors, Peter Steward, Jaap Gijsbertsen and Angela Waki were birding on a small rocky hill near Lokichogio, alongside the road to Nadapal in the southern foothills of the Mogila Range (4°17′10″ N, 34°18′40″ E), when we found a pair of Gosling's Buntings *Emberiza goslingi*. The site was sheltered from the wind, light conditions were good but not too bright, and the area had recently received rain. We obtained prolonged views permitting photographs to be taken, and here we provide documentation in support of the first East Africa record of this more typically West African species.

Description

We observed both a male and a female on the hillside. The male (Fig. 1; left) showed a typical, bold head pattern, marked by four white stripes over the otherwise dark crown and sides of the face. The upper mandible of the bill was dark brown but was not immediately obvious in the field, with the lower mandible a golden-yellow. The eyes appeared black in the field and the lower eyelids were white, while the white supercilium and cheek (malar) stripes were slightly broader than those of Cinnamon-breasted Bunting *Emberiza tahapisi*. The chin, throat, upper breast, nape and sides of the neck were a plain cold grey, and the throat itself showed no suggestion of black or dark mottling, all unlike *E. tahapisi* which is black-throated. There was a fine dark mark under the white malar stripe which is typical of Gosling's Bunting and quite unlike the dark spots seen in taxon *septemstriata*, which is widely treated as a subspecies of *E. tahapisi*. The remainder of the underparts were cinnamon-buff on the mid- to lower breast becoming brighter cinnamon-rufous on the lower belly and flanks, with the vent a paler whitish-buff. On inspection of the wing, the alula was dark, while the lesser coverts were obscured by the scapular feathers. The median coverts were cinnamon-rufous with jet-black centers, while the greater coverts were similar but with centers slightly paler, being dark brown not black. The tertials showed a similar pattern and appearance to the greater coverts but the secondaries were edged rufous with the tips showing darker centres thus forming a rufous panel in the closed wing. The upper side of the tail was dark with cinnamon-rufous edges. The legs were pale pinkish.

The female (Fig. 1; right) was somewhat similar to the male in pattern but paler overall and showing less contrast throughout. The grey on the throat was paler; an almost dirty, yellow-brown, while also being less distinct on the collar with only faint dark brown streaking. Dark areas of the head were dusky-brown instead of black, and pale parts of face were buffy white vs. white. The underparts were buffy cinnamon throughout, and slightly paler than on the male. Meanwhile, the light brown of the upperparts and scapulars were greyer and less warm-toned than in the male, and the streaking on the mantle more extensive leading to almost no contrast between the mantle and the coverts. The edges to the greater coverts were a narrow pale-buff, but the median coverts had very broad bright rufous edges. The lesser coverts and primary coverts were not visible, but the alula appeared entirely cinnamon-rufous.

The secondaries were barely visible, but the primaries showed bright rufous edging similar to the male. The feet and bill were similar to those of the male.

The birds were in general shyer than other "rock buntings" that we have observed and were quick to hide behind small rocks, vegetation and stones. When disturbed they moved surreptitiously between plants but settled less than 30 m away. The male raised its head and came out of cover upon playback of *E. tahapisi* call (the call of Gosling's Bunting was not available to us at the time) but did not call or sing in response. The female was not as shy when observed subsequently.

Figure 1. Images of male (left; V. Ikawa) and presumed female (right; A. Hinkle) Gosling's Buntings *Emberiza goslingi* at Lokichogio, northwest Kenya, on 2 May 2022.

Discussion

We compared various adult Gosling's Bunting images from across the known range, and an example from Ghana (Fig. 2; right) appears almost identical to the Lokichogio male (Fig. 2; left). However, the Kenya bird shows a marginally paler grey throat and cinnamon breast. Compared with a female from Burkina Faso (Fig. 3; right), the Lokichogio female is also marginally paler (Fig. 3; left).

Having recently seen *E. tahapisi* 50 km south of Lokichogio on the same trip, we were also able to compare the habitats used by each across a small area and time window. While we found the *E. tahapisi* in an area with lush vegetation, steeper rocks and larger boulders, we found the *E. goslingi* in a drier area with less vegetation, only short grass, smaller stones and overall, more xeric conditions. In fact, the habitat was very similar to that favoured by *goslingi* in West Africa.

Figure 2. Images of male Gosling's Bunting *E. goslingi* at Lokichogio on 2 May 2022 (left; V. Ikawa) and in Ghana (right; ML205094411 © D. Shapiro).

Figure 3. Images of presumed female Gosling's Buntings *E. goslingi* at Lokichogio (left; A. Hinkle) and in Burkina Faso (right; ML205149991 © J. del Hoyo).

For East Africa, neither Stevenson & Fanshawe (2020), Lewis & Pomeroy (1989), Britton (1980) nor Zimmerman *et al.* (1996) make mention of Gosling's Bunting or even the form *septemstriata* in the region; they only reference the nominate subspecies of *E. tahapisi*. Further afield, Nikolaus (1989) noted "rock buntings" in South Sudan to be "Fairly common and always associated with rocky hills, grass and bushes … *goslingi* in the west around the Boro/Riki River; nominate [*tahapisi*] along the southern border from Zande [east] to Boma [Hills]; and *septemstriata* east of the Nile south to the Sobat River." Ash & Atkins (2009) and Redman *et al.* (2016) also treat birds in southern Ethiopia as nominate *tahapisi*, restricting *septemstriata* to northern Ethiopia and Eritrea. Fry & Keith (2004) likewise state that *septemstriata* is present in South Sudan and Sudan east of the Nile but to the north of South Sudan, with that population continuous with the one in northern Ethiopia and Eritrea, and approximately 900 km north of Lokichogio.

Our record therefore comprises a first known occurrence of Gosling's Bunting in East Africa and has been accepted as such by the East Africa Rarities Committee (N. Hunter, pers. comm.).

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Units: Metric units and their SI equivalents and abbreviations should be used. The

abbreviation should be preceded by a space, '5 km' not '5km'. Latitudes and longitudes in degrees and minutes, not decimal degrees.

Dates: 21 February 2001 [note the order, no comma, not 21st].

Time of day: 13:00 [note colon, no 'hours', 'hrs' or 'h'; 'h' is a unit of time, not of time of day].

Names of birds: For example, African Thrush *Turdus pelios* [no comma, no parentheses, no author's name or date (unless pertinent to a point in the text)].

References cited in the text: Cite multiple references in chronological order, separated by commas, e.g. (Njoroge & Launay 1998, Mlingwa *et al.* 2001) [note ampersand, italicized '*et al.*', no comma between authors' names and date].

List references at the end of an article: See the examples below for format. When printed, authors' names appear in capitals and small capitals *but they should be typed in ordinary roman as shown below.*

Give names of journals in full. (For books, after author(s), year of publication and title, give town followed by the publisher.) Examples:

Cordeiro, N.J. & Githiru, M. 2000. Conservation evaluation for birds of *Brachylaena* woodland and mixed dry forest in northeast Tanzania. *Bird Conservation International* 10: 47–65.

Stuart, S.N., Jensen, F.P., Brøgger-Jensen, S. & Miller, R.I. 1993. The zoogeography of the montane forest avifauna of eastern Tanzania pp. 203–228 *in* Lovett, J.C. & Wasser, S.K. (eds) *Biogeography and ecology of the rainforests of Eastern Africa*. Cambridge: Cambridge University Press.

Urban, E.K., Fry, C.H. & Keith, S. (eds) 1986. *The birds of Africa*. Vol. 2. London: Academic Press.

BirdLife International 2013. Species factsheet: *Balearica regulorum*. Downloaded from http://www:birdlife.org on 14/05/2013.

Both English and scientific names of birds should be given when the species is first mentioned — in the title and in the text — thereafter only one name should be used but both English and scientific names should be given in captions to figures.

Bird names should be those of a stated work. Any deviations from this work should be noted and the reasons given.

Black-and-white or colour photographs and line illustrations should be provided as separate graphic files in JPEG or TIFF format. All articles should be submitted by email in Microsoft Word or as a Rich Text Format (RTF) file.

Please send all contributions to
The Editor, *Scopus: Journal of East African Ornithology*, Email:
scopus@naturekenya.org

Rare birds in East Africa

Records of rare birds from Kenya, Tanzania and Uganda are assessed by the East Africa Rarities Committee. Records from other countries in the region can also be submitted for review and possible publication in *Scopus*. A full account of the record should be sent to the committee Chairman, Nigel Hunter (nigelhunter74@gmail.com) and the *Scopus* editor.

The East Africa Natural History Society

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National Bird Mapping Projects

Kenya Bird Map
kenyabirdmap.adu.org.za

Tanzania Bird Atlas
tanzaniabirdatlas.com